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FLIESLER MEYER LLP 650 CALIFORNIA STREET 14TH FLOOR SAN FRANCISCO, CA 94108			WANG, JUE S	
			ART UNIT	PAPER NUMBER
			2193	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No. 10/784,374	Applicant(s) TAKACSI-NAGY ET AL.	
	Examiner JUE S. WANG	Art Unit 2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 18-20 and 43-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 18-20, and 43-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-3, 18-20, and 43-61 have been examined.
2. Claims 4-14, 21-31 and 35-42 were cancelled in Amendment dated 6/9/2008. Claims 15-17 and 32-34 were cancelled in Amendment dated 10/29/2008.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 18, 43-45, 52-54, and 61 are rejected under 35 U.S.C. 102(a) as being anticipated by Carey et al. "Integration, Web Services Style" (hereinafter Carey).
5. As per claim 1, Carey teaches the invention as claimed, including a method for extending a language, comprising the steps of:

selecting a program source file including a workflow definition created using a workflow language (i.e., Java workflow programs see page 18, section 2.1), wherein the program source file includes a source code and classes therein and a workflow definition that is specified in the form of annotations to the source code and the classes (i.e., a JWF is a Java class with annotations the describe the flow, see page 18, section 2.1);

extending the source code with a plurality of workflow constructs, including an action construct representing an activity that allows a first software component to call an operation on a

Art Unit: 2193

second software component (i.e., JWF includes constructions to specify Java method invocation, see pages 18-19, section 2.1);

using a workflow program according to the workflow definition, including processing, using a computer including a processing device operating thereon, the action construct to allow the first software component to call an operation on the second software component (see pages 18-19, section 2.1, Figure 1); and

passing, according to the workflow definition in the form of annotations to the source code, information selected from one or more files, documents and/or tasks between system resources, according to a set of procedural rules to generate activities at the computer as defined by the workflow definition (see page 18-19, section 2.1, Figure 1).

6. As per claim 18, the limitations recited in this system claim are substantially similar to those recited in claim 1. Therefore, it is rejected using the same reasons as claims 1.

7. As per claim 43, Carey teaches where in the workflow definition is invoked by executing a software application (i.e., web service invocation as one of the primary means for starting or continuing interactions with business processes, see page 18, paragraph 2).

8. As per claim 44, Carey teaches wherein the program source file is a Web service file that includes the workflow definition constructs (see page 18, paragraph 2, page 21 paragraph 3; EN: business processes are web services where the business process is defined by JWF).

Art Unit: 2193

9. As per claim 45, Carey teaches wherein the workflow definition constructs of the Web Service file also references methods and variables for software application running on the system using the workflow (see page 18, last paragraph, page 19, first paragraph).

10. As per claims 52-54, the limitations recited in these method claims are substantially similar to those recited in claims 43-45. Therefore, they are rejected using the same reasons as claims 43-45.

11. As per claim 61, the limitations recited in this computer readable storage medium claim are substantially similar to those recited in claim 1. Therefore, it is rejected using the same reasons as claim 1.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 2, 3, 19, 20, 46, 47, 51, 55, 56, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. "Integration, Web Services Style" (hereinafter Carey), in view of Christensen et al "Extending Java for High-Level Web Service Construction" (hereinafter Christensen).

Art Unit: 2193

14. As per claim 2, Carey does not explicitly teach the plurality of workflow definition constructs are provided as markup language commands that are then used as annotations to the source code and the classes.

Christensen teaches providing markup language commands that are used as annotations to the source code and the classes (see page 6, paragraphs 3, 6, page 7, Fig 3, page 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention that the workflow annotations could have been provided in markup language as taught by Christensen because Carey teaches that the JWF file contains XML related elements (i.e., XML workflow variable and an XQuery expression, page 18, last paragraph) and markup language is a well known standard in web service related applications.

15. As per claim 3, Carey does not explicitly teach the plurality of workflow definition constructs are provided as XML commands that are then used as annotations to the source code and the classes.

Christensen teaches providing XML commands that are used as annotations to the source code and the classes (see page 6, paragraphs 3, 6, page 7, Fig 3, page 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention that the workflow annotations could have been provided in XML as taught by Christensen because Carey teaches that the JWF file contains XML related elements (i.e., XML workflow variable and an XQuery expression, page 18, last paragraph) and XML is a well known standard in web service related applications.

Art Unit: 2193

16. As per claims 19 and 20, the limitations recited in these system claims are substantially similar to those recited in claims 2 and 3. Therefore, they are rejected using the same reasons as claims 2 and 3.

17. As per claim 46, Carey teaches wherein the Web Service file includes the workflow definition constructs as a plurality of workflow annotations to the source code and classes defined in the Web Service file (i.e., annotations reference XQuery methods, see page 18, last paragraph, page 19, first paragraph). Carey does not explicitly teach the annotations are implemented in XML.

Christensen teaches providing XML commands that are used as annotations to the source code and the classes (see page 6, paragraphs 3, 6, page 7, Fig 3, page 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention that the workflow annotations could have been provided in XML as taught by Christensen because Carey teaches that the JWF file contains XML related elements (i.e., XML workflow variable and an XQuery expression, page 18, last paragraph) and XML is a well known standard in web service related applications.

18. As per claim 47, Carey as modified teaches wherein the XML workflow annotations to the source code and classes define a flow logic that can then reference the methods and variables defined in the Web Service file (see page 18, last paragraph, page 19, first paragraph).

Art Unit: 2193

19. As per claim 51, Carey teaches a Java programming language as the program source file, wherein the Java programming language is extended by adding workflow constructs to said Java programming language. and wherein said extending further comprises embedding the workflow constructs in the Java programming language (see page 18, last paragraph, page 19, first paragraph).

Carey does not explicitly teach the annotations are implemented in XML.

Christensen teaches providing XML commands that are embedded in the Java programming language extend Java (see page 6, paragraphs 3, 6, page 7, Fig 3, page 9).

It would have been obvious to one of ordinary skill in the art at the time of the invention that the workflow annotations could have been provided in XML as taught by Christensen because Carey teaches that the JWF file contains XML related elements (i.e., XML workflow variable and an XQuery expression, page 18, last paragraph) and XML is a well known standard in web service related applications.

20. As per claims 55, 56, and 60, the limitations recited in these method claims are substantially similar to those recited in claims 46, 47, and 51. Therefore, they are rejected using the same reasons as claims 46, 47, and 51.

21. Claims 48 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. "Integration, Web Services Style" (hereinafter Carey).

Art Unit: 2193

22. As per claim 48, Carey does not explicitly teach the workflow definitions are provided as a separate Work Flow file that includes workflow definition commands, and that are invoked by the Web Service file using the work definition constructs, to use the workflow as defined by the Work Flow file. However, Carey does teach that the workflow definition commands are invoked by the workflow definition constructs (i.e., annotations reference Java or XQuery methods, see page 18, paragraphs 2, 3, page 19, paragraph 1, Figure 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to keep the workflow definition commands separate from the Web Service file invoking the work definition construct as this would improve code organization.

23. As per claim 57, the limitations recited in this method claim are substantially similar to those recited in claim 48. Therefore, it is rejected using the same reasons as claim 48.

24. Claims 49, 50, 58, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carey et al. "Integration, Web Services Style" (hereinafter Carey), in view of Becker et al. (US 6,904,161 A1).

25. As per claim 49, Carey teaches a light-weight virtual machine at the computer that processes the workflow and that is enabled to, at a particular point in the workflow process, save the workflow execution space including program stack and variable state (i.e., the JWF runtime container that enables the application to be deactivated, see page 19, paragraph 2).

Art Unit: 2193

Carey does not explicitly teach at a later point in time, revive the workflow at the same point in the workflow process using the saved stack and variable state.

Becker is cited to teach a method of workflow execution, including at a particular point in the workflow process, save the workflow state, and, at a later point in time, revive the workflow at the same point in the workflow state (see column 5, line 65 - column 3).

It would have been obvious to one of ordinary skill in the art to have modified Carey such that at a later point in time, revive the workflow at the same point in the workflow process using the saved stack and variable state as taught by Wilcox such that the workflow process can be resumed (see column 6, lines 1-3 of Becker)

26. As per claim 50, Becker teaches setting the workflow program in a dormant condition; and revive the dormant workflow program to its exact state before going dormant (see column 5, line 65 - column 3).

27. As per claims 58 and 59, the limitations recited in these method claims are substantially similar to those recited in claim 49 and 50. Therefore, they are rejected using the same reasons as claims 49 and 50.

Response to Arguments

28. Rejection of claims 1, 18, and 61 under §103(a):

29. As per independent claims 1, 18, and 61, Applicants' arguments have been fully considered, but are moot in light of the new grounds of rejection.

Conclusion

30. Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jue S. Wang whose telephone number is (571) 270-1655. The examiner can normally be reached on M-Th 7:30 am - 5:00pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis Bullock can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2193

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lewis A. Bullock, Jr./
Supervisory Patent Examiner, Art Unit 2193

Jue Wang
Examiner
Art Unit 2193